Amendment dated July 6, 2006
Serial No. 09/842,604

IN THE CLAIMS

Claim 1. (Currently Amended) A method of producing a multicast tree for an application configured to use a first multicast routing protocol from existing protocol independent multicast routing information in a network, at least some of the protocol independent multicast routing information having been created from multicast information associated with an application configured to use a second multicast routing protocol, the network including a plurality of network devices including at least a plurality of routers that are members of a multicast associated with the multicast tree, a set of the routers each including a protocol independent multicast database containing the protocol independent multicast routing information, the method comprising the steps of:

accessing a plurality of the protocol independent multicast databases;

retrieving at least a portion of the existing protocol independent multicast routing information from each ~~located~~ accessed protocol independent multicast database; and

tracing the retrieved existing protocol independent multicast routing information to form the multicast tree.

Claim 2. (Previously Presented) The method as defined by claim 1, wherein the multicast includes a root node, the retrieved existing protocol independent multicast routing information being traced from the root node, the root node being one of the plurality of routers.

Claim 3. (Previously Presented) The method as defined by claim 1, wherein the network implements the Internet Protocol, wherein the first multicast protocol is DVMRP, and wherein the second multicast protocol is PIM.

Claim 4. (Previously Presented) The method as defined by claim 1, wherein each of the set of routers includes a protocol independent unicast database having network information, the method further including:

accessing a plurality of the protocol independent unicast databases;

retrieving at least a portion of the network information from each accessed protocol independent unicast database; and

using the retrieved network information to form the multicast tree.

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Claim 5. (Previously Presented) The method as defined by claim 1, wherein each protocol independent multicast database is a management information base.

Claim 6. (Original) The method as defined by claim 1 wherein at least one of the plurality of network devices includes a protocol dependent multicast database, the multicast tree being formed free from any data retrieved from the protocol dependent multicast database.

Claim 7. (Previously Presented) The method as defined by claim 1, wherein the retrieved protocol independent multicast information is traced by an application incorporating the Simple Network Management Protocol.

Claim 8. (Previously Presented) The method as defined by claim 1 wherein the set of routers includes only one of the plurality of network devices.

Claim 9. (Previously Presented) The method as defined by claim 1, wherein the set of routers includes a first router and a second router, each protocol independent multicast database including a set of protocol independent multicast data, the set of protocol independent multicast data being different in the protocol independent multicast database in the first router than the set of protocol independent multicast data in the protocol independent multicast database in the second router.

Claim 10. (Currently Amended) An apparatus for producing a multicast tree for an application configured to use a first multicast protocol from existing protocol independent multicast information in a network that may have been created using a second multicast protocol, the network including a plurality of network devices including at least a plurality of routers that are members of the multicast, a set of the routers each including a protocol independent multicast database containing protocol independent multicast information, the apparatus comprising:

a multicast database processing module, the multicast database processing module being capable of ~~locating~~ accessing the protocol independent multicast database within each of the set of the routers, the multicast database processing module also being capable of retrieving the

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existing protocol independent multicast information from each ~~located~~ accessed multicast database; and

a tracing module operably coupled with the multicast database processing module, the tracing module being capable of tracing the retrieved existing protocol independent multicast information across the plurality of routers to form the multicast tree according to the first multicast protocol.

Claim 11. (Previously Presented) The apparatus as defined by claim 10, wherein the multicast includes a root node, the tracing module being capable of tracing the retrieved protocol independent multicast information from the root node, the root node being one of the plurality of network devices.

Claim 12. (Previously Presented) The apparatus as defined by claim 10, wherein the network implements the Internet Protocol, wherein the first multicast protocol is PIM, and wherein the second multicast protocol is DVMRP.

Claim 13. (Previously Presented) The apparatus as defined by claim 10, wherein each of the set of routers includes a protocol independent unicast database having network information, the apparatus further including:

a unicast database processing module configured to access a plurality of the protocol independent unicast databases within each of the set of routers, the unicast database processing module also being configured to retrieve at least a portion of the network information from each accessed protocol independent unicast database, the retrieved network ~~data~~ information being used to form the multicast tree.

Claim 14. (Previously Presented) The apparatus as defined by claim 10, wherein each protocol independent multicast database is a management information base.

Claim 15. (Original) The apparatus as defined by claim 10 wherein at least one of the plurality of network devices includes a protocol dependent multicast database, the multicast tree being formed free from any data retrieved from the protocol dependent multicast database.

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Claim 16. (Previously Presented) The apparatus as defined by claim 10, wherein the retrieved protocol independent multicast information is traced by an application incorporating the Simple Network Management Protocol.

Claim 17. (Previously Presented) The apparatus as defined by claim 10 wherein the set of network devices includes only one of the plurality of routers.

Claim 18. (Currently Amended) A computer program product for use on a computer system for producing a multicast tree for an application configured to use a first multicast protocol from existing protocol independent multicast information in a network, at least some of the protocol independent multicast information having been created from protocol specific multicast information associated with an application configured to use a second multicast protocol the network including a plurality of network devices including at least a plurality of routers that are members of a multicast associated with the multicast tree, a set of the routers each including a protocol independent multicast database containing the protocol independent multicast information, the computer program product comprising a computer usable medium having computer readable program code thereon, the computer readable program code comprising:

program code for accessing a plurality of the protocol independent multicast databases;

program code for retrieving at least a portion of the existing protocol independent multicast information from each ~~located~~ accessed protocol independent multicast database; and

program code for tracing the retrieved existing protocol independent multicast information to form the multicast tree.

Claim 19. (Previously Presented) The computer program product as defined by claim 18, wherein the multicast includes a root node, and wherein the program code for tracing the retrieved protocol independent multicast information is configured to trace the retrieved existing protocol independent multicast information from the root node, the root node being one of the plurality of routers.

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Claim 20. (Previously Presented) The computer program product as defined by claim 18, wherein the network implements the Internet Protocol, wherein the first multicast protocol is DVMRP, and wherein the second multicast protocol is PIM.

Claim 21. (Previously Presented) The computer program product as defined by claim 18, wherein each of the set of routers includes a protocol independent unicast database having network information, the computer program code further including:

program code for accessing a plurality of the protocol independent unicast databases;

program code for retrieving at least a portion of the network information from each accessed protocol independent unicast database; and

program code for using the retrieved network information to form the multicast tree.

Claim 22. (Previously Presented) The computer program product as defined by claim 18, wherein each protocol independent multicast database is a management information base.

Claim 23. (Original) The computer program product as defined by claim 18 wherein at least one of the plurality of network devices includes a protocol dependent multicast database, the multicast tree being formed free from any data retrieved from the protocol dependent multicast database.

Claim 24. (Original) The computer program product as defined by claim 18 wherein the program code for tracing implements the Simple Network Management Protocol.

Claim 25. (Previously Presented) The computer program product as defined by claim 18 wherein the set of routers includes only one of the plurality of network devices.

Claim 26. (Currently Amended) An apparatus for producing a multicast tree for an application configured to use a first multicast routing protocol from existing protocol independent multicast information in a network, at least some of the protocol independent multicast information being created by an application configured to use a second multicast routing protocol, the network including a plurality of network devices including at least a plurality of routers that are members

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of a multicast associated with the multicast tree, a set of the routers each including a protocol independent multicast database containing the protocol independent multicast information, the apparatus comprising:

means for accessing a plurality of the protocol independent multicast database;

means for retrieving at least a portion of the existing protocol independent multicast information from each ~~located~~ accessed protocol independent multicast database; and

means for tracing the existing retrieved protocol independent multicast information to form the multicast tree.

Claim 27. (Previously Presented) The apparatus as defined by claim 26, wherein each of the set of routers includes a protocol independent unicast database having network information, the apparatus further including:

means for accessing a plurality of the protocol independent unicast databases;

means for retrieving at least a portion of the network information from each accessed protocol independent unicast database; and

means for using the retrieved network information to form the multicast tree.

Claim 28. (Previously Presented) The apparatus as defined by claim 26, wherein each protocol independent multicast database is a management information base.

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